

What is Claimed is:

1. A sensor for a bearing, comprising:
 - a sensor being incorporated into the bearing or its surroundings, wherein
 - a sensor includes voltage means operable to decrease an output voltage of the sensor in conjunction with an increase of temperature by the measured sensor.
2. The sensor according to claim 1, wherein
 - one or more fixed resistors is connected to the sensor.
3. The sensor according to claim 2, wherein the sensor is constructed by a thermistor, and wherein the fixed resistor is connected in parallel with the sensor.
4. The sensor according to claim 3, wherein the thermistor is constructed by a NTC thermistor having a negative temperature characteristic.
5. The sensor according to claim 3, wherein the thermistor is constructed by a PTC thermistor and a silicon thermistor, and wherein the PTC thermistor and the silicon thermistor have a positive temperature characteristic.
6. A bearing apparatus, comprising:
 - a sensor according to claim 1.
7. The bearing apparatus according to claim 6, further comprising:
 - a temperature detection circuit; and
 - a cable for connecting the sensor and the temperature detection circuit.
8. The bearing apparatus according to claim 7, wherein the temperature detection circuit has a resistor for converting an output of the sensor into a voltage.

9. An abnormality determining apparatus for an axle bearing, comprising:
a bearing apparatus according to claim 6.
10. The bearing apparatus according to claim 6, further comprising:
a rotation speed sensor; and
a vibration sensor.
11. A bearing apparatus, comprising
a sensor according to claim 2.
12. The bearing apparatus according to claim 11, further comprising:
a temperature detection circuit; and
a cable for connecting the sensor and the temperature detection circuit.
13. The bearing apparatus according to claim 12, wherein
the temperature detection circuit has a resistor for converting an output of the sensor into a voltage.
14. An abnormality determining apparatus for an axle bearing, comprising:
a bearing apparatus according to claim 11.
15. The bearing apparatus according to claim 11, further comprising:
a rotation speed sensor; and
a vibration sensor.
16. A bearing apparatus, comprising:
a sensor according to claim 3.
17. The bearing apparatus according to claim 16, further comprising:
a temperature detection circuit; and
a cable for connecting the sensor and the temperature detection circuit.

18. The bearing apparatus according to claim 17, wherein
the temperature detection circuit has a resistor for converting an output of the sensor into a voltage.
19. An abnormality determining apparatus for an axle bearing, comprising:
a bearing apparatus with the sensor according to claim 16.
20. The bearing apparatus according to claim 16, further comprising:
a rotation speed sensor; and
a vibration sensor.